

REMARKS

None of the claims have been amended or cancelled. Claims 29 and 32 have been amended. Claims 1-34 are pending and under consideration. Claims 1-28 are allowed. Claims 1, 15, 29 and 32 are the independent claims. No new matter is presented in this Response.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 29, 31, 32 and 34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Tonami (U.S. Patent 6,765,856) in view of Hutchins et al (U.S. Patent 5,568,465).

Regarding the rejection of independent claim 29, it is noted that claim 29 recites an equalizing method for a reproducing apparatus of a high density optical recording medium, the method comprising: detecting a difference component between a signal component of an input signal and a predetermined threshold level when the signal component of the input signal exceeds the predetermined threshold level; increasing amplitudes of high frequency spectrum components of the input signal and outputting low frequency spectrum components of the input signal without increasing Inter-Symbol Interference; and adaptively suppressing the increased amplitudes of the high frequency spectrum components by the difference component.

The Office Action relies on Tonami for a teaching of detecting a difference between a signal component of an input signal and a predetermined threshold level when the signal component of the input signal exceeds the predetermined threshold level and for a teaching of adaptively suppressing the increased amplitudes of the high frequency spectrum components (page 2, paragraph 4 of the Office Action mailed January 23, 2007). It is respectfully noted that this subject matter is not shown in Tonami.

Initially, it is noted that the Office Action, recognizes that Tonami does not disclose increasing the amplitudes of the high frequency spectrum components (last line of page 2 and first line of page 3 of the Office Action mailed January 23, 2007).

However, as noted above, the Office Action later states that Tonami discloses adaptively suppressing the increased amplitudes of the high frequency spectrum components.

Accordingly, the Examiner's reasoning appears to be flawed since it first recognizes that the reference does not teach increasing the amplitudes of the high frequency spectrum components but yet indicates that Tonami teaches adaptively suppressing the increased

amplitudes. Therefore, is not clear how Tonami could teach adaptively suppressing the increased amplitudes of the high frequency components, when the Office Action recognizes that Tonami does not disclose increasing the amplitudes of the high frequency components in the first place.

Accordingly, Applicants respectfully assert that Tonami fails to teach or suggest the novel features of the claim.

Furthermore, the Office Action also relies on Hutchins for a teaching of increasing amplitudes of the high frequency spectrum components of the input signal and outputting low frequency spectrum components of the input signal without increasing ISI. The Office Action also states that boost and increasing the amplitude are synonymous and can be used interchangeably when applied to any electrical signal (page 3 of the Office Action mailed July 13, 2007). It is respectfully noted that this subject matter is not shown in Hutchins and that the Examiner's characterization of boosting and increasing are incorrect.

Hutchins teaches boosting the higher frequency readback signal components and indicates that this process reduces the dynamic range of the signal (ratio of high to low frequency signal amplitudes) and cancels inter-symbol interferences (ISI).

Accordingly, although Hutchins discloses boosting or increasing a signal component, the boosted or increased signal component is the higher frequency of the signal component. Contrary to Hutchins, independent claim 1 recites increasing the amplitudes of the high frequency spectrum components.

Accordingly, Applicants respectfully assert that the rejection of claim 29 under 35 U.S.C. §103(a) should be withdrawn because neither Tonami nor Hutchins, whether taken singly or combined teach or suggest each feature of independent claim 29.

Regarding the rejections of claim 32, it is noted that this claim recites substantially similar subject matter as claim 1. Thus, the rejection of this claim is also traversed for the reasons set forth above.

Furthermore, Applicants respectfully assert that dependent claims 31 and 34 are allowable at least because of their dependence from claims 29 and 32, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 29 and 32 also distinguish over the prior art.

ALLOWABLE SUBJECT MATTER:

Claims 1-28 are allowed over the prior art of record.

Claims 30 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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